

IN THE CLAIMS

Please amend the claims as follows:

1. (currently amended) A method ~~for improving transmission performance of a transport layer protocol connection that uses a data transmission service of a bearer~~, comprising:
monitoring transport layer data traffic in relation to transmission capacity of said ~~a~~
transport layer protocol connection that uses a data transmission service of a bearer, and
dynamically adjusting said transmission capacity of said bearer according to said
monitored data traffic of said transport layer protocol connection
wherein said bearer provides uplink and downlink transmission capacity,
wherein said data traffic of said transport ~~control~~ layer protocol connection comprises
uplink and downlink data traffic that is separately monitored, and
wherein said uplink and downlink transmission capacity is at least partially separately
adjusted according to said monitored respective uplink and downlink data traffic, ~~[[.]]~~
wherein said uplink and downlink data traffic is at least partially asymmetric.
2. (previously presented) The method according to claim 1, wherein said transport layer
protocol is a transport control protocol or a user datagram protocol.
3. (previously presented) The method according to claim 1, wherein transmission capacity
adjustment information is signaled from at least one transport control protocol instance to at least
one bearer instance.
4. (Cancelled)
5. (Cancelled)

6. (previously presented) The method according to claim 1, wherein said data traffic of said transport layer protocol connection is monitored at least partially by monitoring a state of at least one transport layer protocol segment buffer.
7. (previously presented) The method according to claim 1, wherein said data traffic of said transport layer protocol connection is monitored at least partially by monitoring data input to at least one transport layer protocol socket.
8. (Original) The method according to claim 1, wherein said bearer is a packet-switched or circuit-switched bearer.
9. (Original) The method according to claim 1, wherein said bearer is at least partially based on wireless transmission.
10. (previously presented) The method according to claim 1, wherein said bearer is a high-speed circuit switched data bearer of a global system for mobile communication or of a derivative thereof.
11. (previously presented) The method according to claim 10, wherein said transmission capacity of said bearer is adjusted according to said monitored data traffic of said transport layer protocol connection by changing a maximum number of traffic channels, at least one air interface user rate parameter, or both.
12. (previously presented) The method according to claim 11, wherein said change is performed by using a call control user initiated service level up- and downgrading procedure.
13. (previously presented) The method according to claim 1, wherein said bearer is a general packet radio service bearer or an enhanced bearer of a global system for mobile communication or of a derivative thereof.

14. (previously presented) The method according to claim 13, wherein said transmission capacity of said bearer is adjusted according to said monitored data traffic of said transport layer protocol connection by influencing a temporary block flow setup.

15. (previously presented) The method according to claim 1, wherein said bearer is a bearer that uses code division multiple access as medium access technique, in particular a bearer of an IS-95 system or of a derivative thereof.

16. (previously presented) The method according to claim 1, wherein said bearer is a universal mobile telecommunications system bearer or a bearer of a derivative of said system.

17. (cancelled)

18. (currently amended) A computer readable medium ~~having a computer program stored thereon with instructions, which when executed by operable to cause a processor, to perform~~ the method steps of claim 1.

19. (currently amended) ~~An apparatus A device for improving transmission performance of a transport layer protocol connection that uses a data transmission service of a bearer, comprising:~~

a transport layer monitor ~~configured to for monitoring monitor~~ data traffic in relation to transmission capacity of ~~said a~~ transport layer protocol connection that uses a data transmission service of a bearer, and

a resource allocation device ~~for configured to dynamically adjusting adjust~~ the transmission capacity of said bearer according to said monitored data traffic of said transport layer protocol connection

wherein said bearer provides uplink and downlink transmission capacity,

wherein said data traffic of said transport ~~control layer~~ protocol connection comprises uplink and downlink data traffic that is separately monitored, and

wherein said uplink and downlink transmission capacity is at least partially separately adjusted according to said monitored respective uplink and downlink data traffic,[[.]]

wherein said uplink and downlink data traffic is at least partially asymmetric.

20. (currently amended) A mobile terminal ~~using a transport layer protocol connection that uses a data transmission service of a bearer,~~ comprising:

a transport layer monitor configured to monitor ~~for monitoring~~ data traffic in relation to transmission capacity of said a transport layer protocol connection that uses a data transmission service of a bearer, and

a resource allocation device configured to ~~for~~ dynamically ~~adjusting~~ adjust transmission capacity of said bearer according to said monitored data traffic of said transport layer protocol connection

wherein said bearer provides uplink and downlink transmission capacity,

wherein said data traffic of said ~~TLP~~-transport layer protocol connection comprises uplink and downlink data traffic that is separately monitored in relation to transmission capacity, and

wherein said uplink and downlink transmission capacity is at least partially separately adjusted according to said monitored respective uplink and downlink data traffic,

wherein said uplink and downlink data traffic is at least partially asymmetric.

21. (previously presented) The mobile terminal according to claim 20, wherein said transport layer protocol is a transport control protocol or a user datagram protocol.

22. (previously presented) The mobile terminal according to claim 20, configured to signal transmission capacity adjustment information from at least one transport layer protocol instance to at least one bearer instance.

23. (Cancelled)

24. (Cancelled)

25. (previously presented) The mobile terminal according to claim 20, wherein said data traffic of said transport layer protocol connection is monitored at least partially by monitoring a state of at least one transport layer protocol segment buffer.

26. (previously presented) The mobile terminal according to claim 20, wherein said data traffic of said transport layer protocol connection is monitored at least partially by monitoring data input to at least one transport layer protocol socket.
27. (previously presented) The mobile terminal according to claim 20, wherein said bearer is a packet-switched or circuit-switched bearer.
28. (previously presented) The mobile terminal according to claim 20, wherein said bearer is at least partially based on wireless transmission.
29. (previously presented) The mobile terminal according to claim 20, wherein said bearer is a high-speed circuit switched data bearer of a global system for mobile communication or of a derivative thereof.
30. (previously presented) The mobile terminal according to claim 20, wherein said bearer is a general packet radio service bearer or an enhanced bearer of a global system for mobile communications or of a derivative thereof.
31. (previously presented) The mobile terminal according to claim 20, wherein said bearer is a bearer that uses code division multiple access as a medium access technique, in particular a bearer of an IS-95 system or of a derivative thereof.
32. (previously presented) The mobile terminal according to claim 20, wherein said bearer is a universal mobile telecommunications system bearer or a bearer of a derivative of said system.
33. (previously presented) A system, comprising:
at least one terminal, and
at least one network interface,
wherein said at least one terminal and said at least one network interface use a transport layer protocol connection that uses a data transmission service of a bearer,

wherein data traffic of said transport layer protocol connection is monitored in relation to transmission capacity and

wherein said transmission capacity of said bearer is dynamically adjusted according to said monitored data traffic of said transport layer protocol connection

wherein said bearer provides uplink and downlink transmission capacity,

wherein said data traffic of said transport control protocol connection comprises uplink and downlink data traffic that is separately monitored, and

wherein said uplink and downlink transmission capacity is at least partially separately adjusted according to said monitored respective uplink and downlink data traffic.